

Title: Microbiological Analysis of Liquid Oral Drugs Consumed in Bangladesh

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Objectives:
A microbiological quality control study was performed on oral liquid drugs (antacid suspension, amoxyciline suspension, paracetamol suspension and cough syrup and zinc syrup) in Bangladesh. This study attempted to determine the microbiological quality of the drugs commonly used for disease medication in Bangladesh.
Methods:
Fifteen (15) different types of oral liquid drugs (6 syrups and 9 suspensions) manufactured in different pharmaceutical industries of Bangladesh were microbiologically examined using standard cultural and biochemical methods.
Result:
All the samples except one syrup were found to be contaminated with total viable bacteria and fungi with a maximum load of 10^3 cfu/ml among which 2 syrup samples exceeded the United States Pharmacopeia (USP) limit ($<10^2$ cfu/ml). While the Gram negative bacteria were found to be completely absent in all samples, the prevalence of Gram positive bacteria including *Staphylococcus* spp. and *Bacillus* spp. were significant in both types of samples.
Conclusion:
Existence of microorganisms in the oral liquid samples might explain the treatment complicacy of the diseased children. A routine microbiological study of such drugs is thus suggested.

Biography:
I'm Khaled Hasan, my date of birth is 30 January 1995. I was completed my Bachelor of Science in Microbiology at October 2016 and Masters of Science in Microbiology at April 2018 from Gono Bishwabidyalay (University). Now I work on a pharmaceutical factory as a Quality Control Executive (Microbiologist), at Cosmo Pharma Laboratories Limited.

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